



Phenotypic variation of okra (*Abelmoschus esculentus* L.) genotypes cultivated in Burkina Faso based on qualitative traits

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1 ABSTRACT

The improvement of okra based on qualitative characters is important to enhance its value. This article summarizes the morphological variation of seven okra genotypes from five African countries. The trial was conducted in 2021 in Burkina Faso, following a Fisher block and twelve qualitative traits have been evaluated. To assess phenotypic, visual observations were used, Shannon diversity index and Factorial Correspondence Analysis. A variation of qualitative traits of the genotypes was observed except for the position of the fruit, which was completely erect. Shannon diversity index varied from 0.72 to 0.96. The results showed a high variation among genotypes for flower, fruit, stem and leaf colours, for fruit, leaf shape and for fruit and leaf pubescence. On the fruit, 5 colour modalities, 4 capsules modalities and 3 pubescence modalities were recorded. Factorial Correspondence Analysis revealed of correlations between genotypes and traits on ½ plan. *UAE22* and *A2* are similar by fruit shape and genotype *PUSA* is identified by fruit colour and pubescence. The study found that genotypes *PI49*, *C11* are identified by fruit pubescence only. The introduction of new genotypes in Burkina Faso constitutes a basis for qualitative trait improvement of okra in this country.